NORTH CAVALCADE STREET

TEXAS

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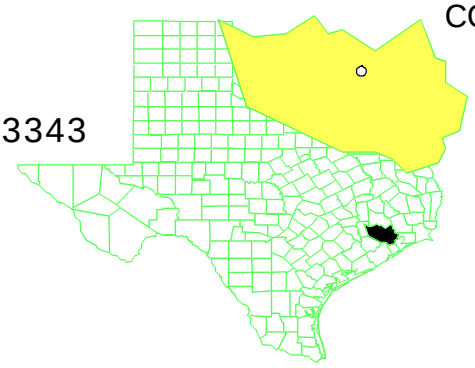


EPA REGION 6

CONGRESSIONAL DISTRICT 18

Harris County

Houston

Updated: April 21, 2000

Site Description

Location: ! Northeast of intersection of Cavalcade & Maury Streets, about one mile southwest of the intersection of Loop 610 North & U.S. 59, Houston, Harris County, Texas.

Population: ! Approximately 50,000 plus urban area.

Setting: ! The nearest residence is 200 feet to west of the site.

! The facility is situated in a industrial/commercial area, with a warehouse and metal casting shop on-site.

! Of the 23-acre site, the original wood preserving operation covered about nine acres; all wood-treating facilities were removed in early 1960's.

Hydrogeology: ! Subsurface geology consists of interbedded clays, silts and sands of the Beaumont formation, with a piezometric level about four feet below surface.

! Two aquifers underlay the site, the Chicot and the Evangeline. The Evangeline is the principal ground water source in the area and is isolated from surface recharge from this site.

Current Site Strategy

C The objective of this site cleanup is to protect human health and the environment by controlling the migration of shallow groundwater contaminants so as to reduce and/or eliminate the potential of contaminating deeper aquifers, and if possible restore the shallow groundwater to a potential future beneficial use. In addition a second objective is to remediate contaminated surface soils so that they no longer pose a dermal contact or ingestion risk. The Texas Natural Resource Conservation Commission (TNRCC) as the lead agency is managing contracts to remediate groundwater and soils. The original plan to pump and treat contaminated groundwater was not successful so TNRCC has initiated a groundwater fate and transport study to determine the risk posed by contamined groundwater. EPA and TNRCC are using the study results to redesign the current remedy.

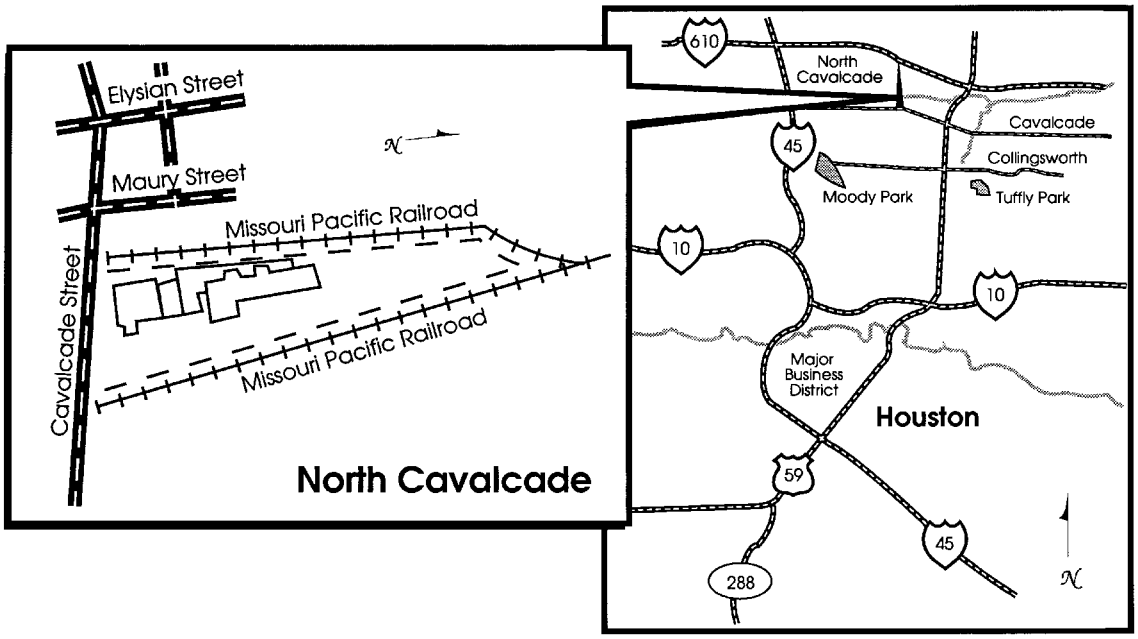
Wastes and Volumes

- The principal pollutants at the North Cavalcade site include creosote and in soil and ground water.
- Estimated volumes of contaminated soil are 10,000 cubic yards and 11.5 million gallons of contaminated ground water.

Site Assessment and Ranking

NPL LISTING HISTORY
Site HRS Score: 37.08
Proposed Date: 10/05/84
Final Date: 6/10/86
NPL Update: No. 2

Site Map and Diagram



The Remediation Process

Site History:

- In 1946, the site was developed for wood treating by Leon Aron (Houston Creosoting Co., Inc.), and operated until a bank foreclosed in 1961.
- The property was vacant until early 1970s, and two warehouses built by 1980.
- The site is presently comprised of various land tracts currently separately owned by Coastal Casting Company, the Eichenhour family and the Dover family.

Health Considerations:

- Soil and shallow groundwater are contaminated.
- Contaminated soils are stockpiled and covered while they await remediation.
- The nearest water well is located 1,500 ft. up gradient from the site. However, shallowest water bearing unit beneath the site at the site is not currently being used as a water source. City of Houston water wells are principally screened in the Evangeline Aquifer about 1000 feet deep and the nearest well is about one mile away up gradient.

Record of Decision

Signed: June 28, 1988

The selected remedy includes biological degradation of soil contaminants, and extraction and carbon adsorption treatment of ground water. This remedy will protect humans from unhealthy exposures to contaminated soil and ground water.

On August 8, 1994 EPA approved an “Explanation of Significant Differences”in issued in July 1994. This explanation raised the cPAH cleanup criteria from 1 ppm to 30 ppm after a 1992 field pilot failed to demonstrate that bioremediation would reduce the cPAH concentration to below 1 ppm.

First five year remedy assessment completed July 8, 1998.

Other Remedies Considered	Reason Not Chosen
1. "No Action"	Human health not protected
2. On-Site Landfill	Contaminants not destroyed
3. On-Site Incineration	No increased benefit and more costly
4. In Situ Soil Flushing	No increased benefit and more costly

Enforcement

! No viable responsible parties have been found.

Community Involvement

! Community Involvement Plan: Developed 3/85, Revised 5/88, 2/89, and 12/92
! Open houses and workshops: 9/85, 12/92, 11/93, 4/94, 10/94
! Proposed Plan Fact Sheet: 4/88
! Public Meeting: 5/88
! ROD Fact Sheet: 7/88
! Fact Sheets: 8/85, 4/87, 7/87, 4/88, 10/88, 4/90 (TWC), 12/90 (TWC), and 6/91 (TWC), 4/94
! Citizens on site mailing list: 80
! Constituency Interest: No formal citizen groups or organizations, generally a low profile site.
! Some demand exists for Spanish translations of fact sheets and informational materials.
! Site Repository: Houston Central Library, Texas & Local History Division, Julia Idison Building, 500 McKinney Street, Houston, TX 77002

Technical Assistance Grant

! Availability Notice: 4/89
! Letters of Intent Received: 1. LIFT Endowment Fund, Inc. - 2/8/90 (withdrawn 8/20/90)
! Final Application Received: North & South Cavalcade St. Group 12/93 and 9/94
! Grant Award: Applications denied
! Current Status: No TAG

Contacts

! **Remedial Project Manager:** Noel Bennett (EPA) 214-665-8514, Mail Code: 6SF-AP
! **State Contact:** (TNRCC) James Sher, P.E., 512/239-2444, Mail Code 143
! **Community Involvement Coordinator:** Linda Rodriguez (EPA) 214-665-2138, Mail Code: 6SF-P
! **Attorney:** Paul Wendel (EPA) 214-665-2136, Mail Code: 6SF-DL
! **State Coordinator:** Karen Bond 214-665-6682, Mail Code: 6SF-AP
! **Contractors:** Foster Wheeler (Groundwater Remedial Design)
IT Corp (Soil Remedial Design)
Eagle Const. (Soil Remedial Action)
! **Region 6 Ombudsman:** Arnie Ondaza

Present Status and Issues

! Operable Unit 1, Groundwater

- The ground water pump and treat system was not as effective as first believed and was suspended in December 1995.
- Since it appears to be a large amount of DNAPL present, it is unlikely that groundwater remediation design can remediate contamination to the ROD goals. FWEC completed a supplemental groundwater field investigation to determine groundwater fate and transport so that the design can be improved or the remedy changed.

- FWEC completed the design changes to the groundwater system.

! Operable Unit 2, Soil

- TNRCC terminated the bioremediation contract with Eagle Construction and EPA is preparing a ROD amendment for the excavated soil on stored on the site

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- TNRCC is planning to conduct a supplemental remedial investigation and feasibility study to support EPA in preparing an amended ROD for a new soil remedy.

Schedule

! **Waste LAN Schedule Milestones**

" Amend soil remedy	2001
" Next 5Yr Remedy Assessment	2003
" Operation and Maintenance Begins	2008
" Close Out Report	2008
" NPL Deletion	2009

Benefits

! 10,000 - 12,000 cubic yards of contaminated soil will be treated.

" Soil Cleanup Criteria

- cPAH 30 ppm*
- Benzene 0.04 ppm

! 11.5 million gallons of contaminated water have been treated to date.

" Groundwater Cleanup Criteria

- cPAH Non-Detect*
- Benzene 5 ppb (parts per billion)

! 21 acres will eventually be returned to potential industrial use.

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*cPAH cleanup criteria changed per July 1994 "Explanation of Significant Differences."

* Detection limit set as 5 ppb.